

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A boron aluminosilicate glass comprising at least the following components (in wt.-%):

SiO ₂	40 to 47
B ₂ O ₃	0.1 to 6
Al ₂ O ₃	0.1 to 4
P ₂ O ₅	[[0.]] <u>0.1</u> to 4
Li ₂ O	0 to 2
Na ₂ O	2 to 7
K ₂ O	>6.5 to 11
MgO	0 to 5
CaO	0[[.]] to 6
BaO	6 to 14
ZnO	20 to 25
La ₂ O ₃	0 to 1.5
ZrO ₂	1 to 7 ₁

wherein said glass is free of lead, and

wherein said glass is an optical glass.

2. (Currently Amended) The boron aluminosilicate glass of claim 1 comprising in
in wt.-%):

SiO ₂	42 to 47
B ₂ O ₃	0.1 to 5
Al ₂ O ₃	0.1 to 2
P ₂ O ₅	0.5 to 3
Na ₂ O	3 to 6
K ₂ O	>6.5 to 10
CaO	1 to 5
BaO	6 to 12
ZnO	20 to 25
ZrO ₂	3 to 7,

up to 1 wt.-% of refining agents.

3. (Withdrawn-Currently Amended) A boron aluminosilicate glass comprising at least the following components (in wt.-%):

SiO_2	38 to 45
B_2O_3	0.1 to 6
Al_2O_3	0.1 to 4
P_2O_5	0.1 to 4
Li_2O	>2 to 6
Na_2O	2 to 7
K_2O	2 to 6.5
MgO	0 to 5
CaO	0.5 to 6.5
BaO	6 to 14.5
ZnO	14 to <20
La_2O_3	>1.5 to 5
ZrO_2	1 to 7 ₁

wherein said glass is an optical glass that is free of lead.

4. (Withdrawn) The boron aluminosilicate glass of claim 3, comprising the following components (in wt.-%):

SiO_2	38 to 43
B_2O_3	0.1 to 5
Al_2O_3	0.5 to 3
P_2O_5	0.5 to 3
Li_2O	>2 to 6
Na_2O	3 to 6
K_2O	3 to 6.5
CaO	2 to 6.5
BaO	8 to 14.5
ZnO	14 to 19
La_2O_3	>1.5 to 3
ZrO_2	2 to 5,

up to 1 wt.-% of refining agents.

5. (Withdrawn-Currently Amended) A boron aluminosilicate glass comprising (in wt.-%):

SiO ₂	35 to 50
B ₂ O ₃	0.1 to 7
Al ₂ O ₃	0.1 to 7
P ₂ O ₅	0.1 to 4
R ₂ O	4 to 24
RO	0 to 12
BaO	6 to 14.5
ZnO	14 to 25
La ₂ O ₃	0 to 5
ZrO ₂	0 to 10,

wherein R₂O is an alkali oxide, RO is an alkaline earth oxide apart from BaO, wherein the amount of Li₂O is 6 wt.-% maximum and wherein the glass, apart from any unintended contaminants, does not contain any GeO₂, SnO, SnO₂, Sb₂O₃, AgO or any rare earth metals and wherein said glass is an optical glass that is free of lead.

6. (Withdrawn) The boron aluminosilicate glass of claim 5 which comprises up to 1 wt.-% of refining agents.

7. (Withdrawn) The boron aluminosilicate glass of claim 6, wherein said refining agents comprise at least one component selected from the group formed by Sb₂O₃, As₂O₃, SnO, NaCl, SO₄²⁻ and F⁻.

8. (Withdrawn) The boron aluminosilicate glass of claim 5 comprising (in wt.-%):

SiO ₂	35 to 50
B ₂ O ₃	0.1 to 7
Al ₂ O ₃	0.1 to 7
P ₂ O ₅	0.1 to 4
Li ₂ O	0 to 6
Na ₂ O	2 to 7
K ₂ O	2 to 11
MgO	0 to 5
CaO	0.5 to 6.5
BaO	6 to 14.5
ZnO	14 to 25
La ₂ O ₃	0 to 5
ZrO ₂	1 to 10

refining agents in common amounts.

9. (Withdrawn) The boron aluminosilicate glass of claim 7, wherein the portion of RO in the total weight is smaller than the portion of BaO.

10. (Withdrawn-Currently Amended) The boron aluminosilicate glass of any claim 5, comprising at least the following components (in wt.-%):

SiO ₂	38 to 47
B ₂ O ₃	0.1 to 6
Al ₂ O ₃	0.1 to 4
P ₂ O ₅	0.1 to 4
Li ₂ O	0 to 6
Na ₂ O	2 to 7
K ₂ O	2 to 11
MgO	0 to 5
CaO	0.5 to 6.5
BaO	6 to 14.5
ZnO	14 to 25
La ₂ O ₃	0 to 5
ZrO ₂	1 to 7.

11. (Withdrawn) The boron aluminosilicate glass of claim 5 having a refractive index n_d of $1.54 \leq n_d \leq 1.62$.

12. (Withdrawn) The boron aluminosilicate glass of claim 5 having an Abbe number of $48 \leq v_d \leq 57$.

13.-18. (Cancelled)

19. (Currently Amended) A boron aluminosilicate glass comprising (in wt.-%):

SiO ₂	35 to 50
B ₂ O ₃	0.1 to 7
Al ₂ O ₃	0.1 to 7
P ₂ O ₅	0.1 to 4
R ₂ O	4 to 24
RO	0 to 12
BaO	6 to 14.5
ZnO	14 to 25
La ₂ O ₃	0 to 5
ZrO ₂	0 to 10,

wherein R₂O is an alkali oxide, RO is an alkaline earth oxide apart from BaO, wherein the amount of Li₂O is 6 wt.-% maximum,

wherein said glass is free of lead, and

wherein said glass is an optical glass.

20. (New) The boron aluminosilicate glass of claim 1, wherein said glass is an optical glass having a refractive index n_d between 1.54 and 1.62.

21. (New) The boron aluminosilicate glass of claim 1, wherein said glass is an optical glass having an Abbe number between 48 and 57.

22. (New) The boron aluminosilicate glass of claim 1, wherein said glass is an optical glass having a refractive index n_d between 1.54 and 1.62 and an Abbe number between 48 and 57.

23. (New) The boron aluminosilicate glass of claim 19, wherein said glass is an optical glass having a refractive index n_d between 1.54 and 1.62.

24. (New) The boron aluminosilicate glass of claim 19, wherein said glass is an optical glass having an Abbe number between 48 and 57.

25. (New) The boron aluminosilicate glass of claim 19, wherein said glass is an optical glass having a refractive index n_d between 1.54 and 1.62 and an Abbe number between 48 and 57.

26. (New) The boron aluminosilicate glass of claim 25, wherein said glass comprises 4 to 12 wt.-% of K_2O .

27. (New) The boron aluminosilicate glass of claim 19, wherein said glass comprises 4 to 12 wt.-% of K_2O .